

City of Cambridge

Executive Department

LOUIS A. DePASQUALE
City Manager

LISA C. PETERSON
Deputy City Manager

May 23, 2019

Robert Lauby
Associate Administrator for Safety
Federal Railroad Administration
1200 New Jersey Avenue SE
Mail Stop 25
Washington, DC 20590

RE: Public Authority Application – Quiet Zone at Highway-Rail Grade Crossing Number 052313H Using Alternative Safety Measures

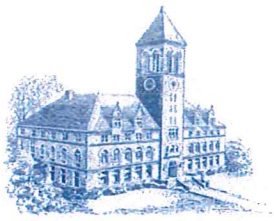
Dear Associate Administrator Lauby,

The City of Cambridge is pleased to submit this public authority application under 49 CFR Chapter II Part 222 Subpart C Section 222.39(b)(1), requesting review and approval of an Alternative Safety Measure (ASM) for use at US DOT National Highway-Rail Grade Crossing Inventory Number 052313H, where Sherman Street crosses the Fitchburg Main Line of the Massachusetts Bay Transportation Authority (MBTA) North Side Commuter Rail in Cambridge, MA.

On September 15, 2018, the City of Cambridge established a new quiet zone at this highway-rail grade crossing, using Supplementary Safety Measures (SSMs) that involved the construction of new 60' long medians, the relocation of two driveways, and the installation of necessary signs and markings. We used the standard SSMs to expedite the establishment of the quiet zone, but the changes required to establish the quiet zone created circulation problems for certain existing and relocated driveways. As a result, we are seeking your review and approval for an ASM that would allow us to shorten the recently-constructed medians to improve circulation at these nearby driveways, while maintaining a Risk Index that is below the Risk Index with Horns. Specifically, we are seeking approval to make the following changes to the medians, while retaining the designation of a quiet zone:

- Removing 35' of the non-traversable median on the south side of the grade crossing, maintaining a 25' non-traversable median and
- Removing 8' of the non-traversable median on the north side of the grade crossing, maintaining a 52' non-traversable median.





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The changes on the south side of the crossing will allow us to reconstruct an existing curb cut to provide a 24' wide driveway located a minimum of 25' south of the railroad crossing gates, improving access to an existing parking lot that serves a nearby school and a local restaurant. This will improve the safety of the parking lot operations and reduce traffic impacts on nearby residential streets. The changes on the north side of the crossing will improve access to an existing curb cut on the west side of Sherman Street that serves a residential and industrial development.

The City has not had a formal diagnostic team meeting for this crossing, but we have consulted individually with representatives from the MBTA and the Massachusetts Department of Transportation, and have met onsite multiple times with staff from the Federal Railroad Administration (FRA). Based on these discussions, we feel confident that the state and federal agencies are supportive of these changes, given the need to balance between additional levels of safety and the impact on the local community.

As described in the attached technical memorandum, the City's Traffic, Parking, and Transportation Department has calculated the new Risk Index with this ASM in place, which is 69,094, as compared to the Risk Index with Horns, which is 85,116. This memo contains additional details on the current and proposed treatments at this crossing and should provide you with the information required to evaluate the effectiveness of the proposed changes. Based on this analysis, we believe that this change meets the requirements for an ASM, and are therefore requesting your approval to make this change, subject to review by you and other Federal Railroad Administration staff. As required under Section 222.39(b)(1)(vi), the City of Cambridge is committed to implementing the proposed improvements, should we receive your approval for this ASM.

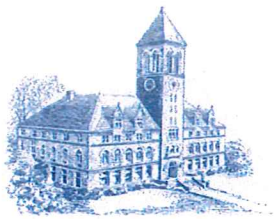
Pursuant to the requirements for this ASM, a Notice of Intent (NOI) was sent on March 8, 2019, via certified mail to the required parties. The City did not receive any comments on the NOI.

As required under Section 222.39(b)(3), this public authority application is being sent to the following parties:

Railroad Owner:

Massachusetts Bay Transportation Authority
Steve Poftak, General Manager
10 Park Plaza, Suite 4510
Boston, MA 02116





City of Cambridge

Executive Department

LOUIS A. DePASQUALE
City Manager

LISA C. PETERSON
Deputy City Manager

Copy to:
Ryan Coholan, Chief Railroad Officer

Railroad Operators:

Keolis Commuter Services
David Scorey, General Manager
470 Atlantic Avenue
Boston, MA 02210

Pan Am Railways
David Fink, President
1700 Iron Horse Park
North Billerica, MA 01862

Law Enforcement Authority Responsible for Vehicular Traffic:

Cambridge Police Department
Branville G. Bard, Commissioner
125 Sixth Street
Cambridge, MA 02142

State Agency Responsible for Highway and Road Safety:

Massachusetts Department of Transportation
Stephanie Pollack, Secretary and Chief Executive Officer
10 Park Plaza, Suite 4160
Boston, MA 02116

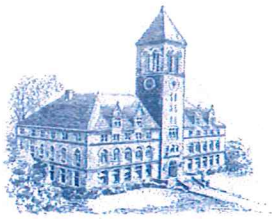
Copy to:
Jonathan Gulliver, Highway Administrator

State Agency Responsible for Grade Crossing Safety:

Massachusetts Department of Public Utilities
Matthew Nelson, Chairman
One South Station, Fifth Floor
Boston, MA 02110

Copy to:
Brian Christy, Director, Transportation Oversight Division





City of Cambridge

Executive Department

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City Manager

LISA C. PETERSON
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Thank you very much for the FRA's ongoing efforts on behalf of the residents of the City of Cambridge, to manage the impact of this highway-rail grade crossing on the public health and quality of life of our community. We look forward to continuing to work with you on improving the safety of train operations in Cambridge.

Should you have any questions on this application or wish to discuss this matter in greater detail, please don't hesitate to contact Joseph Barr, Director of Traffic, Parking, and Transportation, at 617-349-4743 or jbarr@cambridgema.gov.

Attachments:

- U.S. DOT Inventory Forms (2 pages)
- Technical Memo which includes details about present safety measures and information about the proposed safety improvements (2 pages)
- Calculation of Risk Index with Proposed Alternative Safety Measures (1 page)
- Notice of Intent dated March 8, 2019 (3 pages)

Very Truly Yours,

Louis A. DePasquale
City Manager

cc: Joseph E. Barr, Director of Traffic, Parking, and Transportation
Nancy E. Glowa, City Solicitor
Norma Jean Griffith, Federal Railroad Administration
Lou Fangella, Federal Railroad Administration



U. S. DOT CROSSING INVENTORY FORM

DEPARTMENT OF TRANSPORTATION

FEDERAL RAILROAD ADMINISTRATION

OMB No. 2130-0017

Instructions for the initial reporting of the following types of new or previously unreported crossings: For public highway-rail grade crossings, complete the entire inventory Form. For private highway-rail grade crossings, complete the Header, Parts I and II, and the Submission Information section. For public pathway grade crossings (including pedestrian station grade crossings), complete the Header, Parts I and II, and the Submission Information section. For Private pathway grade crossings, complete the Header, Parts I and II, and the Submission Information section. For grade-separated highway-rail or pathway crossings (including pedestrian station crossings), complete the Header, Part I, and the Submission Information section. For changes to existing data, complete the Header, Part I Items 1-3, and the Submission Information section, in addition to the updated data fields. Note: For private crossings only, Part I Item 20 and Part III Item 2.K. are required unless otherwise noted. An asterisk * denotes an optional field.

A. Revision Date (MM/DD/YYYY) 11 / 28 / 2017 8 / 24 / 2018	B. Reporting Agency <input checked="" type="checkbox"/> Railroad <input type="checkbox"/> Transit <input checked="" type="checkbox"/> State <input type="checkbox"/> Other	C. Reason for Update (Select only one) <input checked="" type="checkbox"/> Change in Data <input type="checkbox"/> New Crossing <input type="checkbox"/> Closed <input type="checkbox"/> Re-Open <input type="checkbox"/> Date Change Only <input type="checkbox"/> Change in Primary Operating RR <input type="checkbox"/> No Train Traffic <input type="checkbox"/> Quiet Zone Update <input type="checkbox"/> Admin. Correction	D. DOT Crossing Inventory Number 052313H
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Part I: Location and Classification Information

1. Primary Operating Railroad Massachusetts Bay Transportation Authority [MBTA]		2. State MASSACHUSETTS		3. County MIDDLESEX	
4. City / Municipality <input checked="" type="checkbox"/> In <input type="checkbox"/> Near CAMBRIDGE		5. Street/Road Name & Block Number Sherman Street (Street/Road Name) * (Block Number)		6. Highway Type & No. CITY	
7. Do Other Railroads Operate a Separate Track at Crossing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Specify RR			8. Do Other Railroads Operate Over Your Track at Crossing? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Specify RR GRS		
9. Railroad Division or Region <input type="checkbox"/> None Commuter Rail		10. Railroad Subdivision or District <input type="checkbox"/> None North Side		11. Branch or Line Name <input type="checkbox"/> None Fitchburg Main Line	
12. RR Milepost B 0004.158 (prefix) (nnnn.nnn) (suffix)		16. Crossing Owner (if applicable) <input type="checkbox"/> N/A MBTA			
13. Line Segment * VS 36.1 MAP 3		14. Nearest RR Timetable Station * Porter Square		15. Parent RR (if applicable) <input checked="" type="checkbox"/> N/A	
17. Crossing Type <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private		18. Crossing Purpose <input checked="" type="checkbox"/> Highway <input type="checkbox"/> Pathway, Ped. <input type="checkbox"/> Station, Ped.		19. Crossing Position <input checked="" type="checkbox"/> At Grade <input type="checkbox"/> RR Under <input type="checkbox"/> RR Over	
20. Public Access (if Private Crossing) <input type="checkbox"/> Yes <input type="checkbox"/> No		21. Type of Train <input checked="" type="checkbox"/> Freight <input type="checkbox"/> Intercity Passenger <input checked="" type="checkbox"/> Commuter		22. Average Passenger Train Count Per Day <input type="checkbox"/> Less Than One Per Day <input checked="" type="checkbox"/> Number Per Day 38	
23. Type of Land Use <input type="checkbox"/> Open Space <input type="checkbox"/> Farm <input checked="" type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Institutional <input type="checkbox"/> Recreational <input type="checkbox"/> RR Yard					
24. Is there an Adjacent Crossing with a Separate Number? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, Provide Crossing Number			25. Quiet Zone (FRA provided) <input checked="" type="checkbox"/> No <input type="checkbox"/> 24 Hr <input type="checkbox"/> Partial <input type="checkbox"/> Chicago Excused Date Established		
26. HSR Corridor ID <input checked="" type="checkbox"/> N/A		27. Latitude in decimal degrees (WGS84 std: nn.nnnnnnn) 42.3906820		28. Longitude in decimal degrees (WGS84 std: -nnn.nnnnnnn) -71.1327230	
29. Lat/Long Source <input checked="" type="checkbox"/> Actual <input type="checkbox"/> Estimated					
30.A. Railroad Use *			31.A. State Use *		
30.B. Railroad Use *			31.B. State Use *		
30.C. Railroad Use *			31.C. State Use *		
30.D. Railroad Use *			31.D. State Use *		
32.A. Narrative (Railroad Use) *			32.B. Narrative (State Use) *		
33. Emergency Notification Telephone No. (posted) 800-449-6393		34. Railroad Contact (Telephone No.) 617-222-3615		35. State Contact (Telephone No.) 617-305-3763	

Part II: Railroad Information

1. Estimated Number of Daily Train Movements				
1.A. Total Day Thru Trains (6 AM to 6 PM) 26	1.B. Total Night Thru Trains (6 PM to 6 AM) 12	1.C. Total Switching Trains 0	1.D. Total Transit Trains 0	1.E. Check if Less Than One Movement Per Day How many trains per week? <input type="checkbox"/>
2. Year of Train Count Data (YYYY) 2017		3. Speed of Train at Crossing 3.A. Maximum Timetable Speed (mph) 79 3.B. Typical Speed Range Over Crossing (mph) From 40 to 79		
4. Type and Count of Tracks Main 2 Siding 0 Yard 0 Transit 0 Industry 0				
5. Train Detection (Main Track only) <input type="checkbox"/> Constant Warning Time <input checked="" type="checkbox"/> Motion Detection <input type="checkbox"/> AFO <input type="checkbox"/> PTC <input type="checkbox"/> DC <input type="checkbox"/> Other <input type="checkbox"/> None				
6. Is Track Signaled? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		7.A. Event Recorder <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		7.B. Remote Health Monitoring <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

U. S. DOT CROSSING INVENTORY FORM

A. Revision Date (MM/DD/YYYY) 11/28/2017		PAGE 2		D. Crossing Inventory Number (7 char.) 052313H	
Part III: Highway or Pathway Traffic Control Device Information					
1. Are there Signs or Signals? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					
2. Types of Passive Traffic Control Devices associated with the Crossing					
2.A. Crossbuck Assemblies (count) 0		2.B. STOP Signs (R1-1) (count) 0		2.C. YIELD Signs (R1-2) (count)	
2.D. Advance Warning Signs (Check all that apply; include count) <input type="checkbox"/> None					
<input checked="" type="checkbox"/> W10-1 <u>1</u> <input type="checkbox"/> W10-3 <input type="checkbox"/> W10-11 <input type="checkbox"/> W10-2 <input type="checkbox"/> W10-4 <input type="checkbox"/> W10-12					
2.E. Low Ground Clearance Sign (W10-5) <input type="checkbox"/> Yes (count) <input checked="" type="checkbox"/> No		2.F. Pavement Markings <input checked="" type="checkbox"/> Stop Lines <input type="checkbox"/> Dynamic Envelope <input checked="" type="checkbox"/> RR Xing Symbols <input type="checkbox"/> None		2.G. Channelization Devices/Medians <input type="checkbox"/> All Approaches <input checked="" type="checkbox"/> Median <input type="checkbox"/> One Approach <input checked="" type="checkbox"/> None	
				2.H. EXEMPT Sign (R15-3) <input type="checkbox"/> Yes <input type="checkbox"/> No	
				2.I. ENS Sign (I-13) Displayed <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
2.J. Other MUTCD Signs Specify Type _____ Count <u>2</u> Specify Type _____ Count _____ Specify Type _____ Count _____		2.K. Private Crossing Signs (if private) <input type="checkbox"/> Yes <input type="checkbox"/> No		2.L. LED Enhanced Signs (List types)	
3. Types of Train Activated Warning Devices at the Grade Crossing (specify count of each device for all that apply)					
3.A. Gate Arms (count) Roadway <u>2</u> Pedestrian <u>3</u>		3.B. Gate Configuration <input checked="" type="checkbox"/> 2 Quad <input type="checkbox"/> Full (Barrier) <input type="checkbox"/> 3 Quad Resistance <input type="checkbox"/> 4 Quad <input type="checkbox"/> Median Gates		3.C. Cantilevered (or Bridged) Flashing Light Structures (count) Over Traffic Lane <u>0</u> <input type="checkbox"/> Incandescent Not Over Traffic Lane <u>0</u> <input type="checkbox"/> LED	
				3.D. Mast Mounted Flashing Lights (count of masts) <u>5</u> <input type="checkbox"/> Incandescent <input type="checkbox"/> LED <input type="checkbox"/> Back Lights Included <input type="checkbox"/> Side Lights Included	
3.F. Installation Date of Current Active Warning Devices: (MM/YYYY) _____/_____/_____ <input type="checkbox"/> Not Required		3.G. Wayside Horn <input type="checkbox"/> Yes Installed on (MM/YYYY) ____/____/_____ <input checked="" type="checkbox"/> No		3.H. Highway Traffic Signals Controlling Crossing <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
				3.I. Bells (count) <u>2</u>	
3.J. Non-Train Active Warning <input type="checkbox"/> Flagging/Flagman <input type="checkbox"/> Manually Operated Signals <input type="checkbox"/> Watchman <input type="checkbox"/> Floodlighting <input checked="" type="checkbox"/> None				3.K. Other Flashing Lights or Warning Devices Count <u>0</u> Specify type _____	
4.A. Does nearby Hwy Intersection have Traffic Signals? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		4.B. Hwy Traffic Signal Interconnection <input type="checkbox"/> Not Interconnected <input type="checkbox"/> For Traffic Signals <input type="checkbox"/> For Warning Signs		4.C. Hwy Traffic Signal Preemption <input type="checkbox"/> Simultaneous <input type="checkbox"/> Advance	
				5. Highway Traffic Pre-Signals <input type="checkbox"/> Yes <input type="checkbox"/> No Storage Distance * _____ Stop Line Distance * _____	
				6. Highway Monitoring Devices (Check all that apply) <input type="checkbox"/> Yes - Photo/Video Recording <input type="checkbox"/> Yes - Vehicle Presence Detection <input checked="" type="checkbox"/> None	
Part IV: Physical Characteristics					
1. Traffic Lanes Crossing Railroad Number of Lanes <u>2</u> <input type="checkbox"/> One-way Traffic <input checked="" type="checkbox"/> Two-way Traffic <input type="checkbox"/> Divided Traffic		2. Is Roadway/Pathway Paved? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		3. Does Track Run Down a Street? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
4. Is Crossing Illuminated? (Street lights within approx. 50 feet from nearest rail) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					
5. Crossing Surface (on Main Track, multiple types allowed) Installation Date * (MM/YYYY) ____/____/_____ <input type="checkbox"/> 1 Timber <input checked="" type="checkbox"/> 2 Asphalt <input type="checkbox"/> 3 Asphalt and Timber <input type="checkbox"/> 4 Concrete <input type="checkbox"/> 5 Concrete and Rubber <input type="checkbox"/> 6 Rubber <input type="checkbox"/> 7 Metal <input type="checkbox"/> 8 Unconsolidated <input type="checkbox"/> 9 Composite <input checked="" type="checkbox"/> 10 Other (specify) <u>Flangeway Rubber</u>					
6. Intersecting Roadway within 500 feet? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Approximate Distance (feet) <u>160</u>		7. Smallest Crossing Angle <input type="checkbox"/> 0° - 29° <input type="checkbox"/> 30° - 59° <input checked="" type="checkbox"/> 60° - 90°		8. Is Commercial Power Available? * <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
Part V: Public Highway Information					
1. Highway System <input type="checkbox"/> (01) Interstate Highway System <input type="checkbox"/> (02) Other Nat Hwy System (NHS) <input type="checkbox"/> (03) Federal AID, Not NHS <input checked="" type="checkbox"/> (08) Non-Federal Aid		2. Functional Classification of Road at Crossing <input type="checkbox"/> (0) Rural <input checked="" type="checkbox"/> (1) Urban <input type="checkbox"/> (1) Interstate <input type="checkbox"/> (5) Major Collector <input type="checkbox"/> (2) Other Freeways and Expressways <input type="checkbox"/> (3) Other Principal Arterial <input checked="" type="checkbox"/> (6) Minor Collector <input type="checkbox"/> (4) Minor Arterial <input type="checkbox"/> (7) Local		3. Is Crossing on State Highway System? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
				4. Highway Speed Limit _____ MPH <input type="checkbox"/> Posted <input type="checkbox"/> Statutory	
				5. Linear Referencing System (LRS Route ID) *	
				6. LRS Milepost *	
7. Annual Average Daily Traffic (AADT) Year <u>2002</u> AADT <u>012200</u>		8. Estimated Percent Trucks <u>04</u> %		9. Regularly Used by School Buses? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Average Number per Day <u>0</u>	
				10. Emergency Services Route <input type="checkbox"/> Yes <input type="checkbox"/> No	
Submission Information - This information is used for administrative purposes and is not available on the public website.					
Submitted by _____ Organization _____ Phone _____ Date _____					
Public reporting burden for this information collection is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information. According to the Paperwork Reduction Act of 1995, a federal agency may not conduct or sponsor, and a person is not required to, nor shall a person be subject to a penalty for failure to comply with, a collection of information unless it displays a currently valid OMB control number. The valid OMB control number for information collection is 2130-0017. Send comments regarding this burden estimate or any other aspect of this collection, including for reducing this burden to: Information Collection Officer, Federal Railroad Administration, 1200 New Jersey Ave. SE, MS-25 Washington, DC 20590.					



CITY OF CAMBRIDGE
Traffic, Parking, and Transportation

344 Broadway
Cambridge, Massachusetts 02139

www.cambridgema.gov/traffic

Joseph E. Barr, Director
Stephanie McAuliffe, Assistant Director for Parking Management
Brooke McKenna, Assistant Director for Street Management

Phone: 617-349-4700
Fax: 617-349-4747

TECHNICAL MEMORANDUM

TO: Joseph E. Barr, Director

FROM: Patrick Baxter, PE, PTOE, Engineering Manager

DATE: November 19, 2018

RE: Sherman Street Grade Crossing Alternative Safety Measures

This memo documents the analysis of the proposed Alternative Safety Measures (ASMs) for the Sherman Street Highway-Rail Grade Crossing on Massachusetts Bay Transportation Authority's Fitchburg Main Line (US DOT National Highway-Rail Grade Crossing Inventory Number 052313H). In September 2018, the Department of Public Works (DPW) staff and contractors installed Supplemental Safety Measures (SSMs) on Sherman Street at this highway-rail grade crossing to establish a new quiet zone, addressing neighborhood complaints about noise from train horns.

Prior to the installation of the SSM, the grade crossing included the following safety measures:

- Railroad crossing gates with constant warning time circuits,
- Railroad crossing markings, and
- Railroad crossing warning signs.

The recently installed SSMs include the following improvements to the grade crossing (see Figure 1):

- Installation of a 60' non-traversable median on the north side of the grade crossing;
- Installation of a 60' non-traversable median on the south side of the grade crossing;
- Reconstruction of the Cambridge Montessori School driveway to locate it 60' south of the railroad gates, past the end of the new median;
- Reconstruction of the North Cambridge Garage driveway to locate it 60' north of the railroad gates, past the end of the new median; and
- Installation of NO TRAIN HORN warning signs.



Figure 1 - Sherman Street Grade Crossing with Installed SSM

The City of Cambridge is now seeking to apply for approval for Alternative Safety Measures that will modify the existing medians and driveways to restore access to adjacent properties, which has been limited as part of the SSM installation.

The proposed modifications will include the following adjustments:

- Removing 35 feet of the non-traversable median on the south side of the grade crossing, maintaining a 25-foot non-traversable median;
- Reconstructing the Cambridge Montessori School curb cut to provide a 24-foot wide driveway located a minimum of 25 feet south of the railroad crossing gates; and
- Removing 8 feet of the non-traversable median on the north side of the grade crossing, maintaining a 52 foot non-traversable median.

The Risk Index with the proposed ASM will be 69,094, which is substantially below the Risk Index with Horns (QZRI) of 85,116. The result of the calculations are documented in Table 1, and more details on the calculations are provided in the attached spreadsheet.

Table 1 - ASM Calculation Results

	Effectiveness	Risk Index
Nationwide Significant Risk Threshold		14,723
Risk Index With Horns (QZRI)		85,116
Quiet Zone with No Safety Measures		141,973
Risk Index with SSM	0.80	28,395
Risk Index with ASM	0.51	69,094

Calculation of Risk Index with Proposed Alternative Safety Measures
US DOT National Highway-Rail Grade Crossing Inventory Number 052313H
Sherman Street at the Fitchburg Main Line of the MBTA North Side Commuter Rail

Conditions at Crossing	Description	Effectiveness	Risk Index
Nationwide Significant Risk Threshold	Reference point for evaluation	-	14,723
Quiet Zone with No Safety Measures	Reference point for evaluation	-	141,973
Horns Sounding	Condition prior to quiet zone establishment	-	85,116
Current SSM	60' non-traversable median on both north and south approach	0.80	28,395
Proposed ASM	25' non-traversable median on the south approach and 52' non-traversable median on the north approach	0.51	69,094

The effectiveness of the Proposed ASM is the sum of the length of the proposed medians (25'+52'=77') divided by the length of the current median (120'): $77/120=0.64$, then adjusted based on the 0.8 effectiveness factor of a non-traversable median ($0.64 \times 0.8 = 0.51$)



City of Cambridge

Executive Department

LOUIS A. DePASQUALE

City Manager

March 8, 2019

LISA C. PETERSON

Deputy City Manager

To All Interested Parties:

This letter is a Notice of Intent (NOI), under 49 CFR Ch. II Part 222 Subpart C Section 222.43, to modify the existing Supplemental Safety Measures (SSMs) at the Sherman Street Quiet Zone to create an Alternative Safety Measure (ASM). The City of Cambridge is seeking approval from the Federal Railroad Administration to alter the configuration of the two medians that comprise the SSM at the train horn sounding Quiet Zone (QZ) within the City of Cambridge, Massachusetts, at Sherman Street, on the Fitchburg Main Line of the Massachusetts Bay Transportation Authority (MBTA) North Side Commuter Rail.

The specific information regarding this proposed Alternative Safety Measure is as follows:

US DOT National Highway-Rail Grade Crossing Inventory Number	052313H
Public Roadway Name	Sherman Street
Time Period of Train Horn Restrictions	24 hours/day, 7 days/week
Plans for Improvements	<p>The City of Cambridge is seeking approval for an Alternative Safety Measures that will modify the existing medians and driveways to restore access to adjacent properties, which has been limited as part of the SSM installation.</p> <p>The proposed modifications will include the following adjustments:</p> <ul style="list-style-type: none">• Removing 35 feet of the non-traversable median on the south side of the grade crossing, maintaining a 25-foot non-traversable median;• Reconstructing the Cambridge Montessori School curb cut to provide a 24-foot wide driveway located a minimum of 25 feet south of the railroad crossing gates; and• Removing 8 feet of the non-traversable median on the north side of the grade crossing, maintaining a 52-foot non-traversable median. <p>The Risk Index with the proposed ASM will be 69,094, which is substantially below the Risk Index with Horns</p>



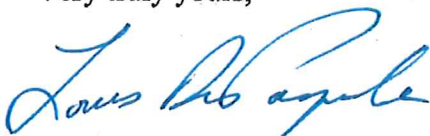
	<p>(QZRI) of 85,116. The effectiveness of the Proposed ASM is the sum of the length of the proposed medians (25'+52'=77') divided by the length of the current median (120'): $77/120=0.64$, then adjusted based on the 0.8 effectiveness factor of a non-traversable median ($0.64 \times 0.8 = 0.51$)</p>
Public Authority Point of Contact	<p>Joseph E. Barr, AICP Director of Traffic, Parking, and Transportation 344 Broadway, Second Floor Cambridge, MA 02139 <i>jbarr@cambridgema.gov</i> 617-349-4743</p>
Parties Receiving Notification	<p>Railroad Owner: Massachusetts Bay Transportation Authority Steve Poftak, General Manager 10 Park Plaza, Suite 4510 Boston, MA 02116 Copies to: Ryan Cohoan, Chief Railroad Officer</p> <p>Railroad Operators: Keolis Commuter Services David Scorey, General Manager 470 Atlantic Avenue Boston, MA 02210</p> <p>Pan Am Railways David Fink, President 1700 Iron Horse Park North Billerica, MA 01862</p> <p>State Agency Responsible for Highway and Road Safety Massachusetts Department of Transportation Stephanie Pollack, Secretary and Chief Executive Officer 10 Park Plaza, Suite 4160 Boston, MA 02116 Copies to: Jonathan Gulliver, Highway Administrator</p> <p>State Agency Response for Grade Crossing Safety Massachusetts Department of Public Utilities Matthew Nelson, Chairman One South Station, Fifth Floor</p>

	<p>Boston, MA 02110</p> <p>Copies to:</p> <p>Brian Christy, Director, Transportation Oversight Division</p> <p>Law Enforcement Authority Responsible for Vehicular Traffic</p> <p>Cambridge Police Department Branville G. Bard, Commissioner 125 Sixth Street Cambridge, MA 02142</p> <p>Federal Railroad Administration Associate Administrator for Safety</p> <p>Robert Lauby 1200 New Jersey Avenue SE Mail Stop 25 Washington, DC 20590</p>
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Parties that wish to provide information or comments on this proposed installation of the Alternative Safety Measure for the Sherman Street QZ, or indicate that they do not have comments, should do so within 60-days from the mailing of this NOI, to the Public Authority Point of Contact listed above.

Thank you very much for your attention to this matter.

Very truly yours,



Louis A. DePasquale
City Manager